



**smt**  
Southern Montana Telephone  
*Local Connection, Global Reach*

P.O. Box 205  
Wisdom, MT 59761  
(406) 689-3333  
Fax (406) 689-3959  
[www.smtel.com](http://www.smtel.com)

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March 6, 2014

Marlene H. Dortch  
Secretary  
Federal Communications Commission  
445 12<sup>th</sup> Street, SW  
Washington, DC 20554

RE: Connect America Fund, WC Docket No. 10-90  
Expression of Interest – Rural Experiments

Dear Ms. Dortch:

Southern Montana Telephone Company ("SMTTC") is filing this non-binding expression of interest for the receipt of funding to undertake three rural experiments. Two of these experiments are in rural price-cap areas that lack high-speed broadband service while one is in our own rural rate-of-return area.<sup>1</sup> At a very high level, the attached three proposals fall in areas where it is not economically feasible to deploy high-speed, fiber-based broadband service without some level of financial support.

Whether any of these three proposals are ultimately funded, each of them will provide the FCC with valuable information regarding technology transitions in both price-cap and rate-of-return rural areas. These proposals should also aid the FCC in setting policy for a potential pathway to long-term reforms surrounding support for broadband infrastructure in truly rural, truly remote areas.

Please feel free to contact me at (406) 689-3333 or via email at [LMason@smtel.com](mailto:LMason@smtel.com) if you have any questions or need additional information.

Sincerely,

Larry B. Mason  
General Manager

Attachments (3)

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<sup>1</sup> See *Connect America Fund*, WC Docket No. 10-90, FCC 14-5, at paragraphs 86-136 (released January 31, 2014)

## **Attachment A**

### **Expression of Interest to Conduct a Rural Experiment Timber Butte Area**

#### **Submitting Entity**

Southern Montana Telephone Company ("SMTC") is a rural incumbent rate-of-return carrier located in southwestern Montana. SMTC serves 950 residential and small business customers across 2,200 square miles and is headquartered in Wisdom, MT, the largest community within our study area, with a population of fewer than 100.

Approximately 60% of the company's current customers are served over an IP-based Fiber-to-the-Home (Ftth) network. In addition to voice service, many customers have access high-speed broadband service and customers served via our Ftth network also have access to Internet Protocol Television (IPTV). The company has borrowed nearly \$17 million from the Rural Utilities Service since 2006 to upgrade its network and has plans to build out our Ftth network to an additional 30% of our existing customers over the next 10 years using internally generated funds.

#### **Proposed Experiment Service Area**

SMTC has built a broadband IP-based ring network. SMTC fiber already runs through the proposed area, which is currently served by CenturyLink, to reach its interconnection point. Numerous CenturyLink customers have approached SMTC asking if we can provide them broadband and TV service because they know our fiber network runs past their homes and businesses.

The proposed project would provide IP-based broadband service to 130-150 households and businesses that currently do not have broadband service at minimum speeds of 3Mbps downstream and 768kbps upstream available to them. Depicted on the National Broadband Map as unserved and denoted as such in the Connect America Cost Model, the census block number that would be served by this experiment is 30001000200.

#### **Broadband Technologies to be Deployed**

In keeping with SMTC's business plan, the experiment would be designed to transition customers currently served by the price-cap carrier onto SMTC's IP-based network. Once the build-out is complete, unserved customers will have access to high-speed broadband service currently unavailable to them. Specifically, preliminary engineering designs entail Ftth using Gigabit Passive Optical Network (GPON) technology which will offer IP-based voice, television and broadband services to customers at speeds up to 100Mbps.

#### **Contemplated Service Offerings**

As envisioned, this project would provide broadband service to customers in rural areas who currently do not have such access, and are unlikely to receive high-capacity broadband service in the foreseeable



future, thereby increasing these customers' access to education opportunities, medical services, and public safety agencies. SMTC intends to offer these customers broadband service at speed tiers up to 10Mbps initially with faster speeds to follow as customer demand dictates. Over this IP-based network, customers would be offered voice, television and broadband services at the same prices offered to our existing customers.

**Funding Needed to Conduct Experiment**

The total capital budget for building the proposed project is estimated to be \$2.5 million, which would be a one-time funding request. Construction can begin immediately and even with the short construction season in Montana, we expect to be able to complete the project within one year of its start. Revenues generated from new customers are expected to be sufficient to cover ongoing operating and maintenance expenses because, if construction is fully funded, SMTC would not need to recover capital expenditures.

## **Attachment B**

### **Expression of Interest to Conduct a Rural Experiment Buxton Area**

#### **Submitting Entity**

Southern Montana Telephone Company ("SMTC") is a rural incumbent rate-of-return carrier located in southwestern Montana. SMTC serves 950 residential and small business customers across 2,200 square miles and is headquartered in Wisdom, MT, the largest community within our study area, with a population of fewer than 100.

Approximately 60% of the company's current customers are served over an IP-based Fiber-to-the-Home (FttH) network. In addition to voice service, many customers have access high-speed broadband service and customers served via our FttH network also have access to Internet Protocol Television (IPTV). The company has borrowed nearly \$17 million from the Rural Utilities Service since 2006 to upgrade its network and has plans to build out our FttH network to an additional 30% of our existing customers over the next 10 years using internally generated funds.

#### **Proposed Experiment Service Area**

SMTC has built a broadband IP-based ring network. SMTC fiber butts up against the proposed area, which is currently served by CenturyLink. Numerous CenturyLink customers have approached SMTC asking if we can provide them broadband and TV service because they know our fiber network is so close to their homes and businesses.

The proposed project would provide IP-based broadband service to 70-100 households and businesses that currently do not have broadband service at minimum speeds of 3Mbps downstream and 768kbps upstream available to them. Depicted on the National Broadband Map as unserved and denoted as such in the Connect America Cost Model, the census block number that would be served by this experiment is 30093000800.

In addition, at least three carriers rely on a single toll route and internet cloud connection. If that single fiber route is cut all three carriers' customers have no access to the internet or to the rest of the world via voice service. The hospital in Dillon Montana, served by CenturyLink, has approached SMTC seeking a backup route for their internet-bound traffic. However, since both SMTC and CenturyLink ride the same middle-mile fiber route, there is no redundant route available. This project would provide a redundant route for both voice traffic and internet-bound traffic for SMTC, CenturyLink and 3-Rivers Telephone Cooperative.

#### **Broadband Technologies to be Deployed**

In keeping with SMTC's business plan, the experiment would be designed to transition customers currently served by the price-cap carrier onto SMTC's IP-based network. These customers are unlikely



to receive broadband service in the foreseeable future without SMTC's intervention. Once the build-out is complete, unserved customers will have access to high-speed broadband service currently unavailable to them. Specifically, preliminary engineering designs entail FttH using Gigabit Passive Optical Network (GPON) technology which will offer IP-based voice, television and broadband services to customers at speeds up to 100Mbps.

### **Contemplated Service Offerings**

As envisioned, this project would provide broadband service to customers in rural areas who currently do not have such access, thereby increasing these customers' access to education opportunities, medical services, and public safety agencies. SMTC intends to offer these customers broadband service at speed tiers up to 10Mbps initially with faster speeds to follow as customer demand dictates. Over this IP-based network, customers would be offered voice, television and broadband services at the same prices offered to our existing customers.

By extending our network to these new customers SMTC will create an essential redundant route at no additional cost. This project will allow redundant middle mile IP transport and internet routes for two carriers in addition to SMTC, as well as the Dillon Montana hospital and various other anchor institutions in the Beaverhead Valley region of Southwestern Montana.

### **Funding Needed to Conduct Experiment**

The total capital budget for building the proposed project is estimated to be \$2 million, which would be a one-time funding request. Construction can begin immediately and even with the short construction season in Montana, we expect to be able to complete the project within one year of its start. Revenues generated from new customers are expected to be sufficient to cover ongoing operating and maintenance expenses because, if construction is fully funded, SMTC would not need to recover capital expenditures.

## **Attachment C**

### **Expression of Interest to Conduct a Rural Experiment Grant Exchange**

#### **Submitting Entity**

Southern Montana Telephone Company ("SMTc") is a rural incumbent rate-of-return carrier located in southwestern Montana. SMTc serves 950 residential and small business customers across 2,200 square miles and is headquartered in Wisdom, MT, the largest community within our study area, with a population of fewer than 100.

Approximately 60% of the company's current customers are served over an IP-based Fiber-to-the-Home (Ftth) network. In addition to voice service, many customers have access high-speed broadband service and customers served via our Ftth network also have access to Internet Protocol Television (IPTV). The company has borrowed nearly \$17 million from the Rural Utilities Service since 2006 to upgrade its network and has plans to build out our Ftth network to an additional 30% of our existing customers over the next 10 years using internally generated funds.

SMTc's Grant exchange is much more isolated than the rest of our exchanges, with a population density of less than 0.2 households per square mile. Absent some level of financial support, SMTc would have to continue serving our Grant exchange over our legacy copper network. Given the 10-year build-out plan described above, this exchange would be the remaining underserved 10% of our customers not served over our IP-based Ftth network. Most Grant exchange customers, including the elementary school, would continue to have, at best, 4Mbps broadband service available over copper and would not have access to many of the high-bandwidth IP-based services available over fiber.

#### **Proposed Experiment Service Area**

The proposed project would provide IP-based broadband service to 90 households, businesses and anchor institutions, most of whom do not have broadband service at minimum speeds of 3Mbps downstream and 768kbps upstream available to them. The census block number that would be served by this experiment is 30001000100.

#### **Broadband Technologies to be Deployed**

In keeping with SMTc's business plan, the experiment would be designed to transition customers currently served over our legacy copper network onto SMTc's IP-based network. Once the build-out is complete, customers will have access to high-speed broadband service currently unavailable to them. Specifically, preliminary engineering designs entail Ftth using Gigabit Passive Optical Network (GPON) technology which will offer IP-based voice, television and broadband services to customers at speeds up to 100Mbps.



**Contemplated Service Offerings**

As envisioned, this project would provide broadband service to customers in rural areas who currently do not have such access, mitigating their relative isolation by increasing access to education opportunities, telemedicine services, and public safety agencies. SMTC intends to offer these customers broadband service at speed tiers up to 10Mbps initially with faster speeds to follow as customer demand dictates. Over this IP-based network, customers would be offered voice, television and broadband services at the same prices offered to our existing customers.

**Funding Needed to Conduct Experiment**

The total capital budget for building the proposed project is estimated to be \$5 million, which would be a one-time funding request. Construction can begin immediately and even with the short construction season in Montana, we expect to be able to complete the project within two years of its start. If funded, this project would create additional efficiencies by eliminating the need to maintain both fiber and copper networks. Revenues generated are expected to be sufficient to cover ongoing operating and maintenance expenses because, if construction is fully funded, SMTC would not need to recover capital expenditures